

AMENDMENTS TO THE CLAIMS

In the Claims:

1. (Currently Amended) A method of identifying a candidate p21 pathway modulating agent, said method comprising the steps of:
 - (a) providing an assay system capable of detecting CSNK1G expression and/or activity comprising cultured cells that express a CSNK1G polypeptide or nucleic acid;
 - (b) contacting the assay system with a candidate test agent ~~under conditions whereby, but for the presence of the test agent, the system provides a reference activity;~~ and
 - (c) ~~detecting a test agent biased activity of the assay system, determining the expression or activity of CSNK1G in the assay system, wherein a difference between the test agent biased activity and the reference activity identifies the test agent as~~ change in CSNK1G expression or activity between the presence and absence of said candidate test agent indicates the presence of a candidate p21 pathway modulating agent.
2. (Canceled)
3. (Currently Amended) The method of Claim 2 1, wherein the cultured cells additionally have defective p21 function.
4. (Withdrawn) The method of Claim 1 wherein the assay system includes a screening assay comprising a CSNK1G polypeptide, and the candidate test agent is a small molecule modulator.
5. (Withdrawn) The method of Claim 4 wherein the assay is a kinase assay.
6. (Currently Amended) The method of Claim 1, wherein the assay system is ~~selected from the group consisting of an apoptosis assay system, a cell proliferation assay system, an angiogenesis assay system, and a hypoxic induction assay system.~~
7. (Withdrawn) The method of Claim 1 wherein the assay system includes a binding assay comprising a CSNK1G polypeptide and the candidate test agent is an antibody.
8. (Withdrawn) The method of Claim 1 wherein the assay system includes an expression assay comprising a CSNK1G nucleic acid and the candidate test agent is a

nucleic acid modulator.

9. (Withdrawn) The method of claim 8 wherein the nucleic acid modulator is an antisense oligomer.
10. (Withdrawn) The method of Claim 8 wherein the nucleic acid modulator is a PMO.
11. (Withdrawn) The method of Claim 1 additionally comprising:
 - (d) administering the candidate p21 pathway modulating agent identified in (c) to a model system comprising cells defective in p21 function and, detecting a phenotypic change in the model system that indicates p21 function is restored.
12. (Canceled)
13. (Withdrawn) A method for modulating a p21 pathway of a cell comprising contacting a cell defective in p21 function with a candidate modulator that specifically binds to a CSNK1G polypeptide, whereby p21 function is restored.
14. (Canceled)
15. (Withdrawn) The method of Claim 13 wherein the candidate modulator is selected from the group consisting of an antibody and a small molecule.
16. (Currently Amended) The method of Claim 1, comprising the additional steps of:
 - ~~(e)~~ (d) providing a ~~secondary~~ second assay system capable of detecting a change in the p21 pathway comprising cultured cells or a non-human animal expressing that express a CSNK1G polypeptide or nucleic acid,
 - ~~(f)~~ (e) contacting the ~~secondary~~ second assay system with the candidate test agent of (b) or an agent derived therefrom ~~under conditions whereby, but for the presence of the test agent or agent derived therefrom, the system provides a reference activity;~~ and
 - ~~(g)~~ (f) ~~detecting an agent-biased activity of the second assay system, determining a change in the p21 pathway in the second assay system, wherein a difference between the agent-biased activity and the reference activity of the second assay system confirms the test agent or agent derived therefrom as~~ change in the p21 pathway between the presence and absence of said candidate test agent or agent derived therefrom confirms the test agent or an agent derived therefrom as a candidate p21 modulating agent[[,]] and wherein the second assay detects an agent-biased change in the p21 pathway.

17. (Currently Amended) The method of Claim 16, wherein the ~~secondary~~ second assay system comprises cultured cells.

18. (Canceled)

19. (Canceled)

20. (Withdrawn) A method of modulating p21 pathway in a mammalian cell comprising contacting the cell with an agent that specifically binds a CSNK1G polypeptide or nucleic acid.

21. (Canceled)

22. (Withdrawn) The method of Claim 20 wherein the agent is a small molecule modulator, a nucleic acid modulator, or an antibody.

23. (Withdrawn) A method for diagnosing a disease in a patient comprising:

- (a) obtaining a biological sample from the patient;
- (b) contacting the sample with a probe for CSNK1G expression;
- (c) comparing results from step (b) with a control;
- (d) determining whether step (c) indicates a likelihood of disease.

24. (Withdrawn) The method of claim 23 wherein said disease is cancer.

25. (Withdrawn) The method according to Claim 24, wherein said cancer is a cancer as shown in Table 1 as having >25% expression level.